We Claim:

1. A pharmaceutical composition comprising a caspase inhibitor and/or a compound of the formula R-Lys-X and at least one pharmaceutically acceptable carrier, polymer matrix, solvent and/or diluents.

2. The pharmaceutical composition according to claim 1, wherein the caspase inhibitor is selected from the group consisting of benzyloxycarbonyl-Val-Ala-Asp-fluoromethyl ketone, Ile-Glu-Thr-Asp-fluoromethyl ketone, *t*-butoxycarbonyl-Asp(OCH_3)-CH_2F, boc-aspartyl(OMe)-fluoromethylketone (BAF) and BOC-Asp-FMK (BD), BD-fmk, Z-FA-fmk, z-VAD, z-Val-Ala-Asp-fluoromethylketone (z-VAD-fmk), IAP, benzyloxycarbonyl-Val-Ala-Asp(OCH_3)-CH_2-fluoromethyl ketone, benzyloxycarbonyl-Ile-Glu(OCH_3)-Thr-Asp(OCH_3)-CH_2-fluoromethyl ketone, Z-AAD-fmk, DEVD, Ac-DEVD-CHO, Z-Asp-CH_2-DCB, acetyl-Asp-Glu-Val-Asp-fluoromethyl-ketone (Ac-DEVD-FMK), YVAD, acetyl-Tyr-Val-Ala-Asp-chloromethyl-ketone (Ac-YVAD-CMK), z-DEVD-fmk, benzyloxycarbonyl-Asp(OCH_3)-Glu(OCH_3)-Val-Asp(OCH_3)-CH_2-fluoromethyl ketone, z-IETD-fmk, Z-VDVAD-fmk, CrmA, Bcl-2, Diap1, cIAP1, cIAP2, XIAP and p35.

3. The pharmaceutical composition according to claim 1, wherein the caspase inhibitor is a di, tri, tetra or pentapeptide covalently bound to chloromethylketone.

4. The pharmaceutical composition according to claim 3, wherein the caspase inhibitor is Ac-Tyr-Val-Ala-Asp-chloromethylketone (Ac-YVAD-CMK).

5. The pharmaceutical composition according to claim 1, wherein the compound of the formula R-Lys-X is selected from the group wherein X represents a hydroxyl group, an amino group, a monoalkyl or dialkylamino group, an alkoxy group, an amino acid, an oligopeptide with 1 – 10 amino acids and wherein R is selected

from the group comprising hydrogen, acyl group, acetyl group, an amino acid or a peptide with 2 – 70 amino acids.

6. The pharmaceutical composition according to claim 5, wherein R represents a peptide having 8 – 12 amino acids.

7. The pharmaceutical composition according to claim 5, wherein R represents a peptide comprising the tetrapeptide His-Phe-Arg-Trp.

8. The pharmaceutical composition according to claim 5, wherein R represents a peptide comprising the tripeptide Phe-Arg-Trp.

9. The pharmaceutical composition according to claim 5, wherein R represents a peptide comprising the tripeptide His-Phe-Arg.

10. The pharmaceutical composition according to claim 5, wherein R represents a peptide comprising at least one amino acid having D configuration.

11. The pharmaceutical composition according to claim 5, wherein R represents a peptide consisting of amino acids having D configuration.

12. The pharmaceutical composition according to claim 5, wherein R represents a peptide bearing an acyl group or acetyl group at the N-terminal end.

13. The pharmaceutical composition according to claim 5, wherein X represents an oligopeptide selected from the group comprising Pro, Pro-Thr, Pro-Val, Pro-Ala, Pro-Arg, Pro-Asn, Pro-Asp, Pro-Cys, Pro-Glu, Pro-Gln, Pro-Gly, Pro-His, Pro-Ile, Pro-Leu, Pro-Lys, Pro-Met, Pro-Phe, Pro-Pro, Pro-Ser, Pro-Trp, Pro-Thr-Thr, Pro-Thr-Val, Pro-Thr-Ala, Pro-Thr-Arg, Pro-Thr-Asn, Pro-Thr-Asp, Pro-Thr-Cys, Pro-Thr-Glu, Pro-Thr-Gln, Pro-Thr-Gly, Pro-Thr-His, Pro-Thr-Ile, Pro-Thr-Leu, Pro-Thr-Lys, Pro-Thr-Met, Pro-Thr-Phe, Pro-Thr-Pro, Pro-Thr-Ser, Pro-

Thr-Trp, Pro-Val-Thr, Pro-Val-Val, Pro-Val-Ala, Pro-Val-Arg, Pro-Val-Asn, Pro-Val-Asp, Pro-Val-Cys, Pro-Val-Glu, Pro-Val-Gln, Pro-Val-Gly, Pro-Val-His, Pro-Val-Ile, Pro-Val-Leu, Pro-Val-Lys, Pro-Val-Met, Pro-Val-Phe, Pro-Val-Pro, Pro-Val-Ser, and Pro-Val-Trp.

14. The pharmaceutical composition according to claim 13, wherein X represents an oligopeptide selected from the group comprising Pro, Pro-Thr or Pro-Val.

15. The pharmaceutical composition according to claim 5, wherein X represents an oligopeptide bearing an amino group, a monoalkyl or dialkylamino group, an alkoxy group, a fluoromethyl ketone or a chloromethyl-ketone at the C-terminal end.

16. The pharmaceutical composition according to claim 5, wherein X represents an oligopeptide comprising at least one amino acid having D configuration.

17. The pharmaceutical composition according to claim 5, wherein the compound of formula R-Lys-X is SYSMEHFRWGKPV.

18. The pharmaceutical composition according to claim 17, wherein at least one amino acid of the compound SYSMEHFRWGKPV has D-configuration.

19. The pharmaceutical composition according to claim 5, wherein the compound of general formula R-Lys-X is a compound derived from the family of POMC-peptides which have anti-inflammatory and antiimmunosuppresive properties.

20. The pharmaceutical composition according to claim 19, wherein the compound derived from the family of POMC-peptides is alpha-, beta- or gamma-MSH, ACTH, LPH or CLIP or protected, acylated, acetylated derivatives of said compounds.

21. The pharmaceutical composition according to claim 5, further comprising at least one anti-inflammatory, anti-prolific, anti-thrombotic, and/or anti-coagulative agent.

22. A method for the preparation of a hemocompatibly coated medical product, comprising the steps of:
    a) providing a surface of a medical product,
    b) coating said surface with a coating composition comprising at least one caspase inhibitor and/or at least one compound of formula R-Lys-X.

23. The method for the preparation of a hemocompatibly coated medical product according to claim 22, further comprising the step c):
    c) coating said caspase inhibitor and/or compound of general formula R-Lys-X containing layer with a layer comprising biologically stable and/or biodegradable polymers.

24. A method for the preparation of a hemocompatibly coated medical product, comprising the steps of:
    a) providing a surface of a medical product,
    b') coating said surface with a first layer comprising biologically stable and/or biodegradable polymers and
    b") coating said first layer with a coating composition comprising at least one caspase inhibitor and/or at least one compound of formula R-Lys-X.

25. The method for the preparation of a hemocompatibly coated medical product according to claim 24, further comprising the step c):
    c) coating said caspase inhibitor and/or compound of general formula R-Lys-X containing layer with a layer comprising biologically stable and/or biodegradable polymers.

26. The method according to any one of claims 22 – 25, wherein the layer of biologically stable and/or biodegradable polymers and/or the layer containing said

caspase inhibitor and/or said compound of general formula R-Lys-X further comprises an anti-inflammatory, anti-prolific, anti-thrombotic, and/or anti-coagulative agent.

27. The method according to any one of claims 22 – 25, wherein the caspase inhibitor is selected from the group consisting of benzyloxycarbonyl-Val-Ala-Asp-fluoromethyl ketone, Ile-Glu-Thr-Asp-fluoromethyl ketone, *t*-butoxycarbonyl-Asp(OCH_3)-CH_2F, boc-aspartyl(OMe)-fluoromethylketone (BAF) and BOC-Asp-FMK (BD), BD-fmk, Z-FA-fmk, z-VAD, z-Val-Ala-Asp-fluoromethylketone (z-VAD-fmk), IAP, benzyloxycarbonyl-Val-Ala-Asp(OCH_3)-CH_2-fluoromethyl ketone, benzyloxycarbonyl-Ile-Glu(OCH_3)-Thr-Asp(OCH_3)-CH_2-fluoromethyl ketone, Z-AAD-fmk, DEVD, Ac-DEVD-CHO, Z-Asp-CH_2-DCB, acetyl-Asp-Glu-Val-Asp-fluoromethyl-ketone (Ac-DEVD-FMK), YVAD, acetyl-Tyr-Val-Ala-Asp-chloromethyl-ketone (Ac-YVAD-CMK), z-DEVD-fmk, benzyloxycarbonyl-Asp(OCH_3)-Glu(OCH_3)-Val-Asp(OCH_3)-CH_2-fluoromethyl ketone, z-IETD-fmk, Z-VDVAD-fmk, CrmA, Bcl-2, Diap1, cIAP1, cIAP2, XIAP and p35.

28. Method according to any one of claims 22 – 25, wherein the compound of general formula R-Lys-X is selected from the group wherein X represents a hydroxyl group, an amino group, a monoalkyl or dialkylamino group, an alkoxy group, an amino acid, an oligopeptide with 1 – 10 amino acids and wherein R is selected from the group comprising hydrogen, acyl group, acetyl group, an amino acid or a peptide with 2 – 70 amino acids.

29. A coated medical product obtained according to the method of any one of claims 22 – 25.

30. The medical product according to claim 29, wherein the medical product is a stent.